SOCIETY MEETING OF FEBRUARY 18, 1987

The third membership meeting of the 1986-87 year attracted 15 members and five guests to the Academy of Natural Sciences in Philadelphia. The meeting included the election of officers. The following were reelected to two-year terms: Roger Fuester (President), Joseph Sheldon (Vice President), Jesse Freese (Treasurer), and Harold White (Corresponding Secretary). Karla Ritter was elected as the new Recording Secretary replacing Ronald Romig who had served for 2 years.

The featured speaker of the evening was Philadelphia physician and member Kenneth Frank who spoke on "Electric Lighting, Moths, and Urban Ecology". His talk was based on his past research on insect circadian rhythms, his long standing interest in Lepidoptera, and his perspectives as an urban resident. It is a common perception that populations of large moths in cities have declined precipitously in recent history. This has occurred during a period in which there has been a tremendous increase in outdoor lighting and a casual link between the correlated phenomena has been suggested. Dr. Frank systematically discussed the many ways in which urban lighting could affect the populations and behavior of night flying insects. For instance, electric lighting could shift circadian rhythms so that flight periods would not coincide with the optimum time for mating. Flight to electric light sources could disturb navigation, and it could increase exposure to predators. Both positive and negative effects are possible, and counter balancing ecological responses may modify these effects. Given the fact that outdoor lighting has increased at the same time as many other changes that could affect urban moth populations, it is impossible to conclude that there is a casual relationship between declining moth populations and outdoor lighting.

Populations of the cynthia moth (*Samia cynthia*) have been declining precipitously in recent decades as has been discussed in recent meetings. Vincent Ventre reported that he and several others observed only one cocoon of this species in an intensive search last November 18 in an area of Philadelphia where several cocoons were found in recent years. Mr. John C. Bair, a lighting contractor for the Philadelphia Department of Streets, came to the meeting because of an invitation extended by Dr. Frank. Mr. Bair brought with him a high-pressure sodium vapor lamp of the kind used to illuminate Philadelphia streets. Dr. Frank set up a spectroscope for observation of the lamp and to demonstrate the difference between the sodium emission spectra and the spectra of fluorescent lighting. The increasingly common "orange" halide lamps used for outdoor lighting do not produce light at the wavelengths (ultraviolet) perceived by most insects in their flight to light. Dr. Frank's multidisciplinary talk and the demonstration elicited many questions. Members entering the night time urban environment after the meeting could not help but look at street lights differently even though it was too cold for moths.

Harold B. White, Corresponding Secretary

SOCIETY MEETING OF MARCH, 18, 1987

"Butterflies! Butterflies!" was the title of the talk presented by Dr. Stanley Temple to the 15 members and six guests who attended the March membership meeting at the University of Delaware. Dr. Temple, a chemist with the duPont Company in Deepwater, N.J., has devoted much of his spare time to various conservation and natural history organizations. In particular he highlighted the activities of the Xerces Society whose name comes from the now extinct butterfly, the Xerces Blue. The Society is dedicated to the preservation of endangered invertebrates of all kinds, not only butterflies. In keeping with the ethics of many local and exotic

butterflies that never entered a killing jar or specimen box. Although Dr. Temple's interest in insects has its roots in a childhood hobby of rearing caterpillars, his interest in insect photography evolved from attempts to make photographs of plants more interesting by combining flowers and their pollinators. In the question session that followed the talk, Dr. Temple discussed topics ranging from food plant preferences of caterpillars to the photographic techniques he uses.

Harold B. White Corresponding Secretary

AMERICAN ENTOMOLOGICAL SOCIETY AWARDS THE FIRST CALVERT PRIZE TO A YOUNG ENTOMOLOGIST

The Calvert Prize has been established by the American Entomological Society. This award will be given annually, if appropriate, to a young scientist from the Delaware Valley who displays unusual accomplishments in the area of entomology. Margot Livingston, an eighth grade student at Allen Middle School in Moorestown, N.J., is the first recipient of the Calvert Prize. The award includes one year memberships in the American Entomological Society and the Young Entomologists Society, a subscription to Entomological News, and a \$25 check to be used for entomological books or supplies.

"Sevin lasts for seven days but its effects last for seven years", was a comment that stimulated Margot to initiate a science project. She compared the effects of Sevin and B.t. on the survival of Black Swallowtail larvae fed foliage sprayed with the insecticides at various times before feeding. In addition to the Calvert Prize her project, "Effects of Gypsy Moth Spraying on the Eastern Swallowtail Butterfly", also won first prize in the Zoology Division and the Gold Medal top prize at the Albert Einstein Science Fair held April 8th at the Pennsylvania National Guard Armory. Members of the Society had the opportunity to meet the prize winner, her parents, and teacher; and see her project at the April 15th membership meeting at the Academy of Natural Sciences of Philadelphia where the award was made.

Philip P. Calvert was commemorated at the 125th Anniversary Meeting of the Society in 1984 (See *Ent. News*, 95(4), 155-162). Beginning at the age of 16 Calvert had a 74 year association with the Society serving as President (1900-15) and Editor of Entomological News (1911-43) among other positions. His teenage interest in insects was nurtured by the Society and the Academy of Natural Sciences of Philadelphia. He in turn nurtured the entomological interests of other young people through the Society and the Academy and as Professor of Biology at the University of Pennsylvania. It is therefore appropriate that the Society should sponsor an award for young entomologists in honor of Dr. Philip P. Calvert. It is particularly fitting that the first recipient of this prize has a strong interest in art. As a teenager Calvert was an accomplished artist. Among Calvert's belongings now preserved in the Archives of the Academy's library is a beautiful color illustration of the larva, pupa, and adult of the Eastern Black Swallowtail Butterfly drawn 102 years ago when he too was 14! A photograph of this drawing will be given to Margot Livingston.

Harold B. White Chairman, Education Committee